# Child Care Subsidy and Early Education: Helping Analyze Needed Data Securely

Presentation to the Early Childhood Advisory Council



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- Virginia Department of Social Services
- Virginia Department of Education
- Virginia Tech
  - Child Development Center for Learning and Research
  - Institute for Policy and Governance



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- What is it? (Goals, context)
- How does it work? (Federated architecture, linking process, confidentiality protections)
- What can it do? (Cross-agency data analysis; reports; studies)
- How is it different from other systems?
- How is it related to ECAC mission?
- Future directions



### Child HANDS Data System

- Secure integrated early childhood data system
- State and local tracking and evaluation tool
- Child- and program-level data linkage
- Built to connect to additional systems (e.g., State Longitudinal Data System, or VLDS)



#### GOAL:

Put all the pieces

together to

answer

important

questions





### How Is Child HANDS Unique?

- Enables local and state agencies to track service receipt and outcomes over time and across agencies at the child or family level.
- Tracks individuals over time without tracking personal information
- Builds on other systems to make administrative data useful beyond immediate reporting period.
- Flexible; built to bring in additional data and connect with Virginia Longitudinal Data System (VLDS; VDOE, SCHEV, VCCS, and VEC).

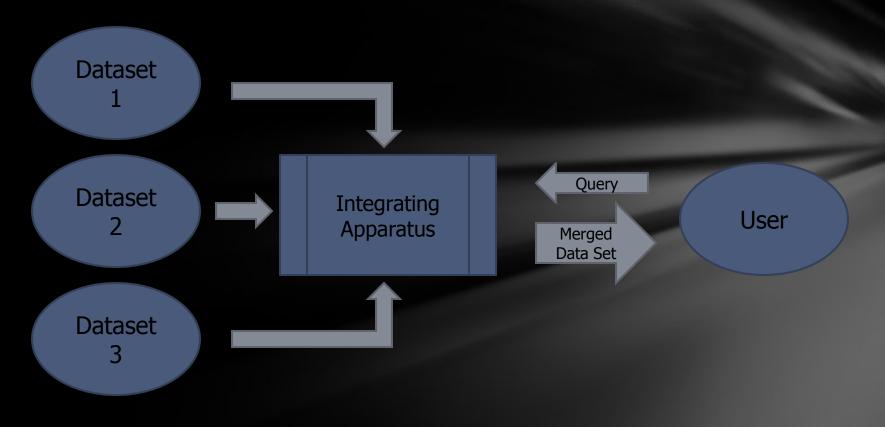
#### Who Can Use It?

- Tiers of access
- State and local agency department heads, division or program administrators; researchers with approval.
- At the lowest level of access, reports are generated but no datasets. Cell suppression is set at 10.
- At the executive state level, and for cleared researchers, HANDS can provide actual datasets for analyses.

# How Does it Work?

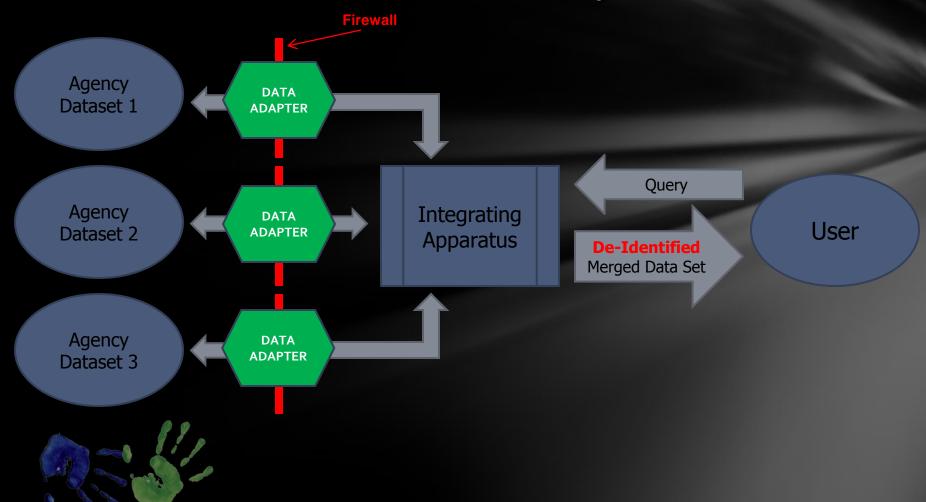


# Typical Federated Data System





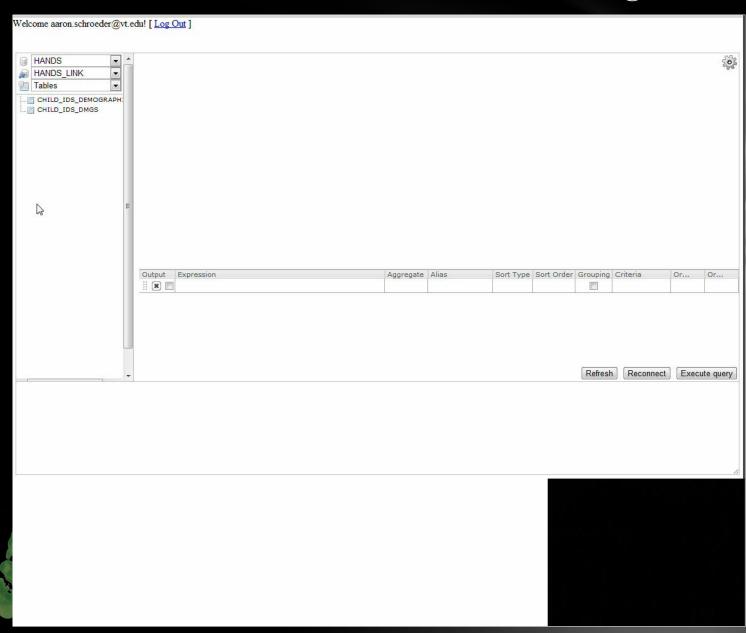
## Multi-Agency, Privacy-Protecting Federated Data System



#### What do we get after creating the Linking Directory? HANDS Linking in Action!

Data being linked and pulled from multiple agency Data Adapters.

This used to take MUCH LONGER.



# What Can It Do?



#### **Initial Questions**

- 1. What type of care are parents choosing with subsidy dollars?
- 2. What is the quality of the child care?

3. How are their children doing in Kindergarten?



Research Q 1: What type of care were parents choosing for their children with subsidy dollars?

- Substantially more parents (72.5%) enrolled their children in licensed child care compared to FFN (27.5%)
- Equally child care centers (44 %) and family child care homes (44%), with 11% in religiously-exempt placements.



# Q2: What is the quality of care?

Quality Type	Quality Indicator	Data Source
Licensed or not	VA Child care license	VDSS DOLPHIN
License violations	Number and type of licensing violations	VDSS Risk Assessment Matrix
Center Environment	Classroom Observations	VSQI (VDSS and Virginia Interactive)
Staff Qualifications	Transcripts, professional Development records	Early Childhood Professional Registry (in development)



# Research Q3: How did children who used subsidy fare in Kindergarten?

- Children who had longer continuous spells of subsidized care attended more days of public school kindergarten
- Children who had longer care spells scored higher on fall Kindergarten PALS screener
- Accounting for greater attendance, this group of children was more likely to meet fall Kindergarten PALS benchmarks.



# Preliminary Conclusions

- Project Child HANDS matching algorithms are capturing a very high percentage of eligible matches; supports use of the system.
- Preliminary results examining child care subsidy patterns indicate longer continuous spells of care predicts better school readiness in domains we can measure.
- If replicated and robust, findings may have policy implications.



# Examples of Other Policy or Evaluation Questions

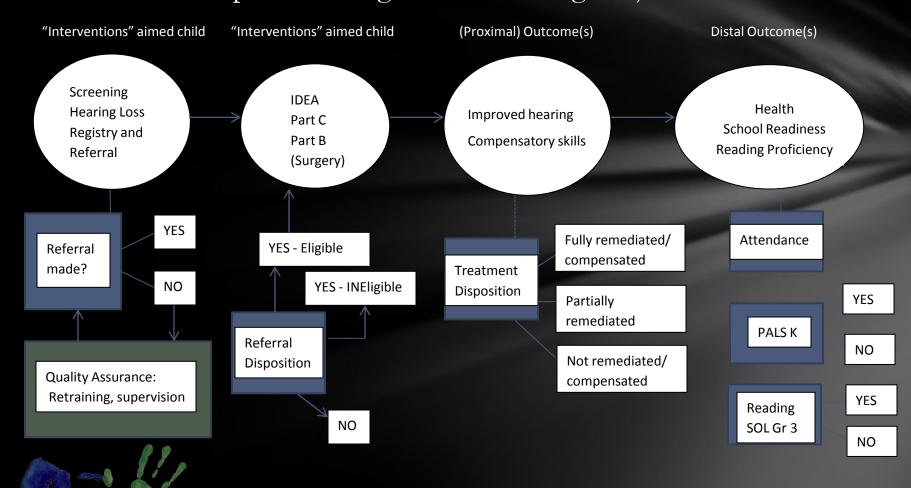
- 1. What are the social service trajectories and school outcomes of children born with special health care needs? (Hearing loss, birth defects)
- 2. How many children with highest needs are being served in high quality early childhood care and education programs?
- 3. What impact do early childhood programs have on later school outcomes?

# One policy research thrust: What are the outcomes associated with different programs/interventions?

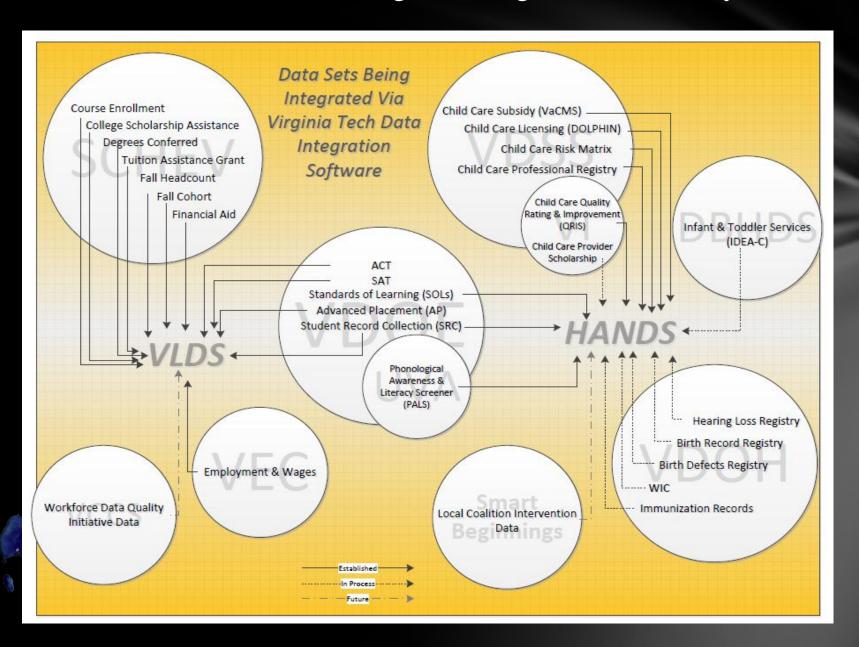
#### Example: Hearing Loss Screening

Program	Intended Outcome(s)	Lead Agency/Data	Outcome(s) Data
		Source	Source(s)
Hearing Loss Registry	Referral/services	VDOH/Hearing Loss	Receipt of (Type)
		Registry	Services (Part B, Part
			C, IEP, other?); dosage
Hearing Loss Registry and EI	Services that improve	VDOH/VDBHDS/VDO	Elementary school
	hearing/	E	achievement/SRC,
	Speech and language	IDEA Part B, Part C	PALS, SOLs

#### Conceptual Model of Research Question, "What are the outcomes associated with different programs or interventions?" <u>Example: Hearing Loss Screening Trajectories</u>



#### Child HANDS and the Virginia Longitudinal Data System



## Project Child HANDS and ECAC

- Child HANDS can act as the data system for annual "report cards" on early childhood, over and above aggregate statistics (Smart Beginnings Plan with trajectories)
- Can facilitate program evaluations
- Can help drive data-driven policy and administrative decisions
- With support, can begin to undertake research policy agenda recommended by ECAC
- Federal grant ends September 30

#### Benefits of Child HANDS

#### Data can be used to

- Improve ECE workforce training
- Assess program/service implementation for program successes
- Help pinpoint need for change or improvement

#### At a broader level,

- Understand patterns of family mobility
- Track patterns of service receipt across agencies
- Obtain "bird's eye view" of families at risk who seek services



#### Benefits of Child HANDS

- Integrated data systems leverage resources toward several ends
- ECAC guidelines stipulated Data Integration Task Force because these systems promote better understanding of associations between children, ECE programs, ECE workforce characteristics and children's outcomes over time
- Can explore the number of services a child or family receives concurrently and/or over time



#### Future Directions

- Add data from VaCMS, and from VDH and VDBHDS; local Head Start data
- Link to state longitudinal data system (SLDS)
- Provide infrastructure to link to other programs and systems (Medicaid, foster care, juvenile justice, among others)
- Develop communication mechanism and plan so tool remains used and useful



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IDEA Part C (Early Intervention)

### www.childhands.org

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